

NixNox project: places to stargaze.

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Abstract

The places where you can enjoy the celestial vault in its greatest splendour are disappearing with the increase of light pollution. The NixNox project promotes a collaborative effort of amateur and professional astronomers to locate y characterize the night sky of spots of easy access where star gazing under unpolluted skies.

To obtain the night sky background it is necessary to observe and measure standard stars using a telescope and CCD camera. This is a technical task that demands time and data analysis. We designed a simple method that relies in measures with a hand-held device, as the Sky Quality Meter (SQM) or the TESS photometer, during clear and moonless nights. Besides the usual measure at zenith, the NixNox method demands observations at 20, 40, 60 y 80 degrees over the horizon at 12 orientations in all cardinal directions. The resulting all-sky map representing the night sky brightness of the complete vault provides visual information of the location of the sources of light pollution and their relative contribution to the brightness.

We have more that 130 characterized places with information of the location, how to arrive, facilities, and panoramic pictures (day and night) that allow the interested citizen to get an idea of horizon of the open-air observatory. The information is displayed in a webpage and our goal is to encourage the society to enjoy these places and the public administration to appreciate and to preserve them. (See poster).